What is claimed is:

1. A method for reducing damage to an ischemic tissue which comprises contacting cells of the tissue with an inhibitor of Early Growth Response Factor - 1 Protein (Egr-1).

2. The method of claim 1, wherein the inhibitor is an organic molecule having a molecular weight from about 500 daltons to about 50 kilodaltons.

3. The method of claim 1, wherein the inhibitor is a nucleic acid.

4. The method of claim 1, wherein the inhibitor is a compound which inhibits activity of Early Growth Response Factor - 1 Protein (Egr-1) conjugated to a carrier.

5. The method of claim 1, wherein the inhibitor is a compound which inhibits expression of the Early Growth Response Factor - 1 Protein (Egr-1) in the cells of the tissue.

6. The method of claim 1, wherein the inhibitor is a nucleic acid molecule which comprises a polynucleotide sequence complementary to the polynucleotide sequence of Early Growth Response Factor - 1 mRNA.

7. The method of claim 1, wherein the inhibitor is a peptide, a peptidomimetic compound, a nucleic acid molecule, a small molecule, an organic compound, an inorganic compound, or an antibody or a fragment thereof.

8. The method of claim 4, wherein the carrier is a pharmaceutically acceptable carrier.

9. The method of claim 1, wherein the tissue is vascular tissue.

10. The method of claim 1, wherein the tissue is a lung, a heart, a kidney, a vein, an artery, a stomach, a colon, a liver, skin, an eye, a pancreas, a finger, a brain, a toe or a limb.

11. The method of claim 1, wherein the contacting of the cells with the inhibitor occurs *in vitro*.

12. The method of claim 1, wherein the ischemic tissue is to be transplanted into a subject.

13. The method of claim 1, wherein the tissue has been subjected to reduced or interrupted blood flow.

14. The method of claim 1, wherein the damage to the ischemic tissue comprises cell death, abnormal cell function, abnormal cell growth, or inability for cell to maintain normal function.

15. The method of claim 1, wherein the inhibitor is a nucleic acid consisting essentially of the polynucleotide sequence 5'-CTTGGCCGCTGCCAT-3' (SEQ ID NO:1).

16. A method for reducing vascular injury during reperfusion of an ischemic tissue in a subject which comprises contacting the tissue with a compound which inhibits expression of Early Growth Response Factor - 1 (Egr-1) protein in the tissue so as to reduce vascular injury in the tissue during reperfusion.

17. The method of claim 16, wherein the tissue is an ischemic tissue.

18. The method of claim 16, wherein the tissue is an organ which is to be transplanted into the subject.

19. The method of claim 16, wherein the tissue is a lung, a heart, a kidney, a vein, an artery, a stomach, a colon, a liver, skin, an eye, a pancreas, a brain, a finger, a toe or a limb.

20. The method of claim 16, wherein the compound is a nucleic acid which comprises a polynucleotide sequence complementary to the polynucleotide sequence of Early Growth Response Factor - 1 mRNA.

21. The method of claim 16, wherein the compound is a peptide, a peptidomimetic compound, a nucleic acid molecule, a small molecule, an organic compound, an inorganic compound, or an antibody or a fragment thereof.

22. The method of claim 16, wherein the subject has suffered a stroke, or a myocardial infarction.

23. The method of claim 16, wherein the subject is undergoing angioplasty, cardiac surgery, vascular surgery, or organ transplantation.

24. The method of claim 23, wherein the vascular surgery is coronary artery surgery.

25. The method of claim 16, wherein the vascular injury comprises cell death, abnormal cell function, abnormal cell growth, or inability for cell to maintain normal function.

26. The method of claim 16, wherein the inhibitor is a nucleic acid consisting essentially of the polynucleotide sequence 5'-

CTTGGCCGCTGCCAT-3' (SEQ ID NO:1).

27. The method of claim 16, wherein the inhibitor is contacted with the tissue before, during or after reperfusion of the ischemic tissue.